WEST Search History

DATE: Thursday, June 06, 2002

Set Name side by side	Query	Hit Count	Set Name result set	
DB=USPT, PGPB, JPAB, EPAB, DWPI; PLUR=YES; OP=ADJ				
L8	L1 and L4 and L5	97	L8	
L7	La and L4 and L5	4370	L7	
L6	L1 and L2 and L3	3	L6	
L5	oligonucleotide	42687	L5	
L4	antisense	21119	L4	
L3	vascular injury	1381	L3	
L2	ischemic tissue	909	L2	
L1	egr-1	159	L1	

END OF SEARCH HISTORY

	FILE 'BIOS	IS, MEDLINE, CAPLUS, EMBASE' ENTERED AT 15:39:33 ON 12 JUN 2002
L1	13954	VASCULAR INJURY
L2	4040	ISCHEMIC TISSUE
L3	4523	EGR-1
L4	129	EARLY GROWTH RESPONSE FACTOR-1
L5	0	L1 AND L2 AND L3 AND L4
L6	4	L1 AND L2 AND L3
L7	0	L1 AND L2 AND L4
L8	107829	REPERFUSION
L9	4	L1 AND L2 AND L3 AND L8
L10	49	L1 AND L3
L11	8	L2 AND L3
L12	71657	ANTISENSE
L13	199	L3 AND L12
T.1 4		

=> d fhitstr ibib abs 1-4 kwic ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS L3 IT 196222-26-1 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleotide sequence; sequences of antisense oligonucleotides and catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy) 196222-26-1 CAPLUS RN. DNA, d(C-T-T-G-G-C-C-G-C-T-G-C-C-A-T) (9CI) (CA INDEX NAME) CN NOT APT *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ACCESSION NUMBER: 2001:219765 CAPLUS DOCUMENT NUMBER: 134:344560 TITLE: Sequences of antisense oligonucleotides and catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy INVENTOR(S): Khachigian, Levon Michael PATENT ASSIGNEE(S): Unisearch Ltd., Australia PCT Int. Appl., 79 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. A1 20010503 WO 2000-AU1315 20001026 WO 2001030394 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, FL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: AU 1999-3676 A 19991026 The present invention relates to a method for the treatment of tumors, the method comprising inhibiting angiogenesis in a subject in need thereof characterized in that angiogenesis is inhibited by administering to the subject an agent which inhibits induction of EGR, an agent which decreases expression of EGR or an agent which decreases the nuclear accumulation or activity of EGR. The present invention also relates to a method of screening for agents which inhibits angiogenesis. In particular, the invention provides sequences of antisense oligonucleotides and catalytic DNA targeting EGR-1 mRNA and their uses in cancer therapy. REFERENCE COUNT: THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT TISequences of antisense oligonucleotides and catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy

AB The present invention relates to a method for the treatment of tumors, the method comprising inhibiting angiogenesis in a subject in need thereof characterized in that angiogenesis is inhibited by administering to the subject an agent which inhibits induction of EGR, an agent which decreases expression of EGR or an agent which decreases the nuclear accumulation or activity of EGR. The present invention also relates to a method of

```
screening for agents which inhibits angiogenesis. In particular, the
    invention provides sequences of antisense
    oligonucleotides and catalytic DNA targeting EGR-1 mRNA and their
    uses in cancer therapy.
    DNAzyme antisense oligonucleotide sequence Egr1 mRNA
ST
    inhibitor anticancer
IT
    Quaternary structure
        (DNA triplex, for decressing Egr-1 gene expression; sequences
        of antisense oligonucleotides and catalytic DNA
        targeting Egr-1 mRNA and uses thereof in cancer therapy)
ΙT
    mRNA
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (EGR-1; sequences of antisense oligonucleotides and
        catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy)
TT
    Gene, animal
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Egr-1, altering expression of; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
IT
    Transcription factors
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Egr-1; sequences of antisense oligonucleotides and
        catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy)
TΤ
    Ribozymes
    RL: BAC (Biological activity or effector, except adverse); BPN
     (Biosynthetic preparation); BSU (Biological study, unclassified); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (deoxy; sequences of antisense oligonucleotides and
        catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy)
IT
    DNA
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (double-stranded, of Egr gene; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
IT
    Antisense RNA
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (for Egr-1 mRNA; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
IT
     Drug screening
        (for angiogenesis inhibitor; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
IT
     Angiogenesis
     Cell migration
        (inhibition of; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
ΙT
   Gene therapy
        (modulating Egr-1 gene expression; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
IT
    Antitumor agents
        (sequences of antisense oligonucleotides and
        catalytic DNA targeting Egr-1 mRNA and uses thereof in cancer therapy)
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
```

```
(single-stranded, for targeting Egr DNA; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
TΨ
    Neoplasm
        (solid, inhibitor; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
ΙT
     Antisense oligonucleotides
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (targeting Egr-1 mRNA; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
TΤ
     Proliferation inhibition
        (vascular endothelial; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
     196222-25-0 196222-26-1
                               284057-57-4
                                             284057-58-5
TT
     284057-59-6
                   284057-60-9
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        (nucleotide sequence; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
     259241-59-3
IT
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (nucleotide sequence; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
     140039-69-6
                   140070-40-2
                                 140773-02-0, GenBank J04154
                                                                217884-56-5
IT
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     217884-57-6
                   337402-33-2
                                 337402-34-3
     337402-37-6
                   337402-38-7
                                 337402-39-8
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; sequences of antisense
        oligonucleotides and catalytic DNA targeting Egr-1 mRNA and
        uses thereof in cancer therapy)
     ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
L3
TΤ
     196222-26-1
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; catalytic DNA targeted to EGR-1 mRNA
        and their therapeutic use)
RN
     196222-26-1 CAPLUS
CN
     DNA, d(C-T-T-G-G-C-C-G-C-T-G-C-C-A-T) (9CI)
                                                  (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                         2000: 493667 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         133:116709
                         Catalytic DNA targeted to EGR-1 mRNA and their
TITLE:
                         therapeutic use
INVENTOR(S):
                         Atkins, David G.; Baker, Andrew R.; Khachigian, Levon
                         Michael
PATENT ASSIGNEE(S):
                         Unisearch Limited, Australia; Johnson & Johnson
                         Research Pty. Ltd.
SOURCE:
                         PCT Int. Appl., 62 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
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English

LANGUAGE:

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19971024
                                           ZA 1997-2000
                                                            19970307
     ZA 9702000
                       Α
     EP 934404
                      A1
                            19990811
                                           EP 1997-906032 19970307
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             IE, FI
                                           JP 1997-531259
     JP 20<del>00506</del>725
                       Т2
                            20000606
                                                            19970307
     U8 6200960
                            20010313
                                           US 1999-142779 19990413
                       B1
                                                        A 19960307
PRIORITY APPLN. INFO .:
                                        AU 1996-8554
                                                         W 19970307
                                        WO 1997-AU140
     A method of inhibiting proliferation of cells by inhibiting induction or
     decreasing expression of the Egr-1 gene or decreasing the nuclear
     accumulation or activity of the Egr-1 gene product is described. Egr-1 is
     found to be one of the immediate-early genes induced in response to
     vascular injury and to play a role in restenosis and atherosclerosis.
     Inhibitors of Egr-1 expression may include antisense DNA,
     ribozymes, or transcriptional decoys. Antisense
     oligonucleotides to Egr-1 were taken by smooth muscle cells in
     culture without significant degrdn. and inhibited their proliferation.
     Egr-1 protein synthesis was inhibited, but Sp1 synthesis was not.
     A method of inhibiting proliferation of cells by inhibiting induction or
AΒ
     decreasing expression of the Egr-1 gene or decreasing the nuclear
     accumulation or activity of the Egr-1 gene product is described. Egr-1 is
     found to be one of the immediate-early genes induced in response to
     vascular injury and to play a role in restenosis and atherosclerosis.
     Inhibitors of Egr-1 expression may include antisense DNA,
     ribozymes, or transcriptional decoys. Antisense
     oligonucleotides to Egr-1 were taken by smooth muscle cells in
     culture without significant degrdn. and inhibited their proliferation.
     Egr-1 protein synthesis was inhibited, but Sp1 synthesis was not.
     restenosis inhibition Egrl gene; antisense DNA Egrl endothelial
ST
     cell proliferation; vascular smooth muscle cell proliferation Egr1
IT
     Antisense DNA
       Ribozymes
     study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (as inhibitor of Egr-1 gene expression; control of Egr-1 synthesis and
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

activity in inhibition of endothelial cell proliferation in control of restenosis and atherosclerosis)

196222-25-0 196222-26-1 IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antisense DNA to Egr-1 gene for inhibition of gene expression; control of Egr-1 synthesis and activity in inhibition of endothelial cell proliferation in control of restenosis and atherosclerosis)

=> d his

(FILE 'HOME' ENTERED AT 16:52:39 ON 20 JUN 2002)

'FILE 'REGISTRY' ENTERED AT 16:53:19 ON 20 JUN 2002 L18 S CTTGGCCGCTGCCAT/SQSN

FILE 'CAPLUS' ENTERED AT 16:55:22 ON 20 JUN 2002

L2

4 S L2 AND ((ANTI(W)SENSE) OR ANTISENSE OR APTAMER OR TRIPLEX OR L3

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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APPLICATION NO. DATE
     PATENT NO.
                        KIND DATE
                       ____
                              20000720
                                               WO 2000-AU11
                                                                  20000111
     WO 2000042173
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             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              EP 2000-902488
                                                                  20000111
                         A1
                              20011107
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                            AU 1999-8103
                                                              A 19990111
                                            WO 2000-AU11
                                                              W 20000111
     The present invention relates to DNAzymes which are targeted against mRNA
AB
     mols. encoding EGR-1 (also known as Egr-1 or NGFI-A). The present
     invention also relates to compns. including these DNAzymes and to methods
     of treatment involving administration of the DNAzymes. Thus, a DNAzyme
     binding to bp 189-207 of human EGR-1 mRNA and cleaving the 198G-199U bond
     blocked induction of EGR-1 and inhibited growth of human smooth muscle
     cells.
REFERENCE COUNT:
                                  THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                                  RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
IT
     Ribozymes
     RL: BAC (Biological activity or effector, except adverse); BPN
     (Biosynthetic preparation); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (deoxy; catalytic DNA targeted to EGR-1 mRNA and their therapeutic use)
ΙT
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                     140773-02-0, GenBank J04154 196222-26-1
     284060-50-0
                    284060-51-1
                                   284060-52-2
                                                   284060-53-3
     RL: PRP (Properties)
         (unclaimed nucleotide sequence; catalytic DNA targeted to EGR-1 mRNA
         and their therapeutic use)
     ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
L3
IT
     259164-92-6
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); BIOL (Biological study);
     PROC (Process)
         (effect of Egr-1 inhibition by phosphorothioate
         oligonucleotides on vascular smooth muscle cell proliferation
         and regrowth after mech. injury in vitro)
RN
     259164-92-6 CAPLUS
     DNA, d(P-thio)(C-T-T-G-G-C-C-G-C-T-G-C-C-A-T) (9CI)
CN
                                                                (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                           1899:644873 CAPLUS
ACCESSION NUMBER:
                           175495 بعدد
DOCUMENT NUMBER:
TITLE:
                           Vascular smooth muscle cell proliferation and regrowth
                           after mechanical injury in vitro are
                           Egr-1/NGFI-A-dependent
AUTHOR(S):
                           Santiago, Fernando S.; Atkins, David G.; Khachigian,
                           Levon M.
                           Centre for Thrombosis and Vascular Research, The
CORPORATE SOURCE:
                           University of New South Wales, Sydney, 2052, Australia
```

SOURCE: American Journal of Pathology (1999), 155(3), 897-905

CODEN: AJPAA4; ISSN: 0002-9440

PUBLISHER: American Society for Investigative Pathology

DOCUMENT TYPE: Journal LANGUAGE: English

repair following injury.

Smooth muscle cell (SMC) proliferation is a key event in renarrowing of AB blood vessels after balloon angioplasty. Mech. injury imparted to the arterial wall in exptl. models induces the expression of the immediate-early gene, egr-1. Egr-1 binds to and activates expression from the proximal promoters of multiple genes whose products can, in turn, influence the vascular response to injury. Here, we used antisense strategies in vitro to inhibit rat vascular SMC proliferation by directly targeting Egr-1. A series of phosphorothicate antisense oligonucleotides of 15 base length and complementary to various theor. accessible regions within Egr-1 mRNA were synthesized and assessed for their ability to selectively inhibit SMC proliferation in an Egr-1-dependent manner. Western blot anal. revealed that two oligonucleotides, AS2 and E11, inhibited Egr-1 synthesis in cells exposed to serum without affecting levels of the zinc finger protein Sp1. AS2 and Ell inhibited serum-inducible [3H]thymidine incorporation into DNA, as well as serum stimulation of total cell nos. Size-matched phosphorothioate oligonucleotides with random, scrambled, sense or mismatch sequences failed to inhibit. Antisense Egr-1 inhibition was nontoxic and reversible. These oligonucleotides also inhibited SMC regrowth after mech. injury in vitro. Egr-1 thus plays a key regulatory role in SMC proliferation and

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Smooth muscle cell (SMC) proliferation is a key event in renarrowing of AB blood vessels after balloon angioplasty. Mech. injury imparted to the arterial wall in exptl. models induces the expression of the immediate-early gene, egr-1. Egr-1 binds to and activates expression from the proximal promoters of multiple genes whose products can, in turn, influence the vascular response to injury. Here, we used antisense strategies in vitro to inhibit rat vascular SMC proliferation by directly targeting Egr-1. A series of phosphorothicate antisense oligonucleotides of 15 base length and complementary to various theor. accessible regions within Egr-1 mRNA were synthesized and assessed for their ability to selectively inhibit SMC proliferation in an Egr-1-dependent manner. Western blot anal. revealed that two oligonucleotides, AS2 and E11, inhibited Egr-1 synthesis in cells exposed to serum without affecting levels of the zinc finger protein Spl. AS2 and Ell inhibited serum-inducible [3H]thymidine incorporation into DNA, as well as serum stimulation of total cell nos. Size-matched phosphorothioate oligonucleotides with random, scrambled, sense or mismatch sequences failed to inhibit. Antisense Egr-1 inhibition was nontoxic and reversible. These oligonucleotides also inhibited SMC regrowth after mech. injury in vitro. Egr-1 thus plays a key regulatory role in SMC proliferation and repair following injury.

ST vessel smooth muscle proliferation Egr1 restenosis; angioplasty phosphorothicate oligonucleotide Egr1 vessel proliferation

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(Egr-1; effect of Egr-1 inhibition by phosphorothicate oligonucleotides on vascular smooth muscle cell proliferation and regrowth after mech. injury in vitro)

IT Phosphorothicate oligonucleotides

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study);

```
PROC (Process)
        (effect of Egr-1 inhibition by phosphorothioate
        oligonucleotides on vascular smooth muscle cell proliferation
        and regrowth after mech. injury in vitro)
ΤТ
     Artery, disease
        (restenosis; effect of Egr-1 inhibition by phosphorothicate
        oligonucleotides on vascular smooth muscle cell proliferation
        and regrowth after mech. injury in vitro)
IT
     Blood vessel
        (smooth muscle; effect of Egr-1 inhibition by phosphorothioate
        oligonucleotides on vascular smooth muscle cell proliferation
        and regrowth after mech. injury in vitro)
ΙT
     259164-92-6
                  259164-93-7 259164-94-8
                                              259164-95-9
     259164-96-0
                  259164-97-1
                                259164-98-2
                                               259164-99-3
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); BIOL (Biological study);
     PROC (Process)
        (effect of Egr-1 inhibition by phosphorothioate
        oligonucleotides on vascular smooth muscle cell proliferation
        and regrowth after mech. injury in vitro)
     ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
T.3
IT
     196222-26-1
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antisense DNA to Egr-1 gene for inhibition of gene
        expression; control of Egr-1 synthesis and activity in inhibition of
        endothelial cell proliferation in control of restenosis and
        atherosclerosis)
     196222-26-1 CAPLUS
RN
     DNA, d(C-T-T-G-G-C-C-G-C-T-G-C-C-A-T) (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                        1987:618194 CAPLUS
ACCESSION NUMBER:
                      127:257645
DOCUMENT NUMBER:
TITLE:
                         Control of Egr-1 synthesis and activity in inhibition
                         of endothelial cell proliferation in control of
                         restenosis and atherosclerosis
                         Khachigian, Levon Michael
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Unisearch Ltd., Australia; Khachigian, Levon Michael
SOURCE:
                         PCT Int. Appl., 28 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
                      A1
                           19970912
     WO 9732979
                                          WO 1997-AU140 19970307
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             LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,
             VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             ML, MR, NE, SN, TD, TG
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AU 9720865

AU 707943

Α1

В2

19970922

19990722

AU 1997-20865

19970307

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Welcome to STN International! Enter x:x

LOGINID:ssspta1635txg

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * SESSION RESUMED IN FILE 'HOME' AT 11:18:55 ON 17 JUN 2002 FILE 'HOME' ENTERED AT 11:18:55 ON 17 JUN 2002

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 0.84 0.84 FULL ESTIMATED COST

=> file medline, biosis, caplus, embase, scisearch

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 3.15 FULL ESTIMATED COST 3.15

FILE 'MEDLINE' ENTERED AT 11:25:40 ON 17 JUN 2002

FILE 'BIOSIS' ENTERED AT 11:25:40 ON 17 JUN 2002 COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'CAPLUS' ENTERED AT 11:25:40 ON 17 JUN 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE 'SCISEARCH' ENTERED AT 11:25:40 ON 17 JUN 2002 COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

=> egr-1 5659 EGR-1 L1

=> early growth response factor-1 L2 163 EARLY GROWTH RESPONSE FACTOR-1

=> transcription factor?

281805 TRANSCRIPTION FACTOR?

=> ischemic tissue

L44746 ISCHEMIC TISSUE

=> repurfusion

L513 REPURFUSION

=> reperfusion

L6 140326 REPERFUSION

=> ls

L7 23475 LS

=> ds

L8 75909 DS

=> dh

L9 39793 DH

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=> d his
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L2
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L3
         281805 TRANSCRIPTION FACTOR?
L4
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L5
             13 REPURFUSION
         140326 REPERFUSION
L6
L7
          23475 LS
^{18}
          75909 DS
          39793 DH
L9
=> del L5, L7, L8, L9
DELETE L5 L7 L8 L9? (Y)/N:y
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
L1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
           4746 ISCHEMIC TISSUE
L4
         140326 REPERFUSION
L6
=> oligonucleotide?
        211490 OLIGONUCLEOTIDE?
\Rightarrow L1 and L2 and L3 and L4
             0 L1 AND L2 AND L3 AND L4
=> L1 and L2 and L4
L11
             O L1 AND L2 AND L4
=> L1 and L4 and L6
L12
             5 L1 AND L4 AND L6
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
L1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
```

```
211490 OLIGONUCLEOTIDE?
L9
L10
              O L1 AND L2 AND L3 AND L4
L11
              0 L1 AND L2 AND L4
L12
              5 L1 AND L4 AND L6
=> del L10, L11
```

=> d his

DELETE L10 L11? (Y)/N:y

divergent gene families underlying ischemic stress.

- AU Yan S F; Fujita T; Lu J; Okada K; Shan Zou Y; Mackman N; Pinsky D J; Stern D M
- SO NATURE MEDICINE, (2000 Dec) 6 (12) 1355-61. Journal code: 9502015. ISSN: 1078-8956.

=> ti

L13 365396 TI

=> d ti, au, so L12 1-5

- L12 ANSWER 1 OF 5 MEDLINE
- TI Egr-1, a master switch coordinating upregulation of divergent gene families underlying ischemic stress.
- AU Yan S F; Fujita T; Lu J; Okada K; Shan Zou Y; Mackman N; Pinsky D J; Stern D M
- SO NATURE MEDICINE, (2000 Dec) 6 (12) 1355-61. Journal code: 9502015. ISSN: 1078-8956.
- L12 ANSWER 2 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI Egr-1, a master switch coordinating upregulation of divergent gene families underlying ischemic stress.
- AU Yan, Shi-Fang (1); Fujita, Tomoyuki; Lu, Jiesheng; Okada, Kenji; Zou, Yu Shan; Mackman, Nigel; Pinsky, David J.; Stern, David M.
- SO Nature Medicine, (December, 2000) Vol. 6, No. 12, pp. 1355-1361. print. ISSN: 1078-8956.
- L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
- TI Egr-1, a master switch coordinating upregulation of divergent gene families underlying ischemic stress
- AU Yan, Shi-Fang; Fujita, Tomoyuki; Lu, Jiesheng; Okada, Kenji; Zou, Yu Shan; Mackman, Nigel; Pinsky, David J.; Stern, David M.
- SO Nature Medicine (New York) (2000), 6(12), 1355-1361 CODEN: NAMEFI; ISSN: 1078-8956
- L12 ANSWER 4 OF 5 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
- TI Egr-1, a master switch coordinating upregulation of divergent gene families underlying ischemic stress.
- AU Yan S.-F.; Fujita T.; Lu J.; Okada K.; Yu Shan Zou; Mackman N.; Pinsky D.J.; Stern D.M.
- SO Nature Medicine, (2000) 6/12 (1355-1361). Refs: 50 ISSN: 1078-8956 CODEN: NAMEFI
- L12 ANSWER 5 OF 5 SCISEARCH COPYRIGHT 2002 ISI (R)
- TI Egr-1, a master switch coordinating upregulation of divergent gene families underlying ischemic stress
- AU Yan S´F (Reprint); Fujita T; Lu J´S; Okada K; Zou Y S; Mackman N; Pinsky D J; Stern D M
- SO NATURE MEDICINE, (DEC 2000) Vol. 6, No. 12, pp. 1355-1361.

 Publisher: NATURE AMERICA INC, 345 PARK AVE SOUTH, NEW YORK, NY 10010-1707.

 ISSN: 1078-8956.
- => d his

(FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON 17 JUN 2002

L1 5659 EGR-1

L2 163 EARLY GROWTH RESPONSE FACTOR-1

```
(FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
           5659 EGR-1
L1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
=> d ti, au, so
L12 ANSWER 1 OF 5
                       MEDLINE
     Egr-1, a master switch coordinating upregulation of
     divergent gene families underlying ischemic stress.
ΑU
     Yan S F; Fujita T; Lu J; Okada K; Shan Zou Y; Mackman N; Pinsky D J; Stern
SO
     NATURE MEDICINE, (2000 Dec) 6 (12) 1355-61.
     Journal code: 9502015. ISSN: 1078-8956.
=> d ti, au, so/all
'SO' MUST END IN '/Q', '/A', '/L', '/S' OR '/B'
The saved name for a query (or structure or screen set) must end with
'/Q'. The saved name for an answer set must end with '/A'. The saved
name for an L# list must end with '/L'. SDI request names must end
with '/S'. To see a list of all saved query, answer set,, and L# list
names for this loginid, enter "DISPLAY SAVED" at an arrow
prompt (=>). Enter "DISPLAY SAVED/S" to see a list of SDI request
names. Enter "DISPLAY SAVED/B" to see a list of BATCH search
requests.
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
           5659 EGR-1
L1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
        281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
        140326 REPERFUSION
L9
        211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
=> d ti, au, so L12/1-5
'L72' MUST END IN '/Q', '/A', '/L', '/S' OR '/B'
The saved name for a query (or structure or screen set) must end with
'/Q'. The saved name for an answer set must end with '/A'. The saved
name for an L# list must end with '/L'. SDI request names must end
with '/S'. To see a list of all saved query, answer set,, and L# list
names for this loginid, enter "DISPLAY SAVED" at an arrow
prompt (=>). Enter "DISPLAY SAVED/S" to see a list of SDI request
names. Enter "DISPLAY SAVED/B" to see a list of BATCH search
requests.
=> d ti, au, so L12
```

L12 ANSWER 1 OF 5

MEDLINE

Egr-1, a master switch coordinating upregulation of

```
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
L13
         365396 TI
=> del L13
DELETE L13? (Y)/N:y
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
T.1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
=> rd L12
MISSING OPERATOR RD L12
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> dup rem
ENTER L# LIST OR (END):L12
PROCESSING COMPLETED FOR L12
              1 DUP REM L12 (4 DUPLICATES REMOVED)
                ANSWER '1' FROM FILE MEDLINE
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
L1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
L13
              1 DUP REM L12 (4 DUPLICATES REMOVED)
=> L1 and L9 and L6
             1 L1 AND L9 AND L6
=> d ti, au, so
L14 ANSWER 1 OF 1
                       MEDLINE
ΤI
     Gene expression profile in mouse myocardium after ischemia.
ΑU
     Lyn D; Liu X; Bennett N A; Emmett N L
SO
     PHYSIOLOGICAL GENOMICS, (2000 Apr 27) 2 (3) 93-100.
     Journal code: 100894125. ISSN: 1094-8341.
```

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(FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
L1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
         281805 TRANSCRIPTION FACTOR?
L3
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
L13
              1 DUP REM L12 (4 DUPLICATES REMOVED)
L14
              1 L1 AND L9 AND L6
=> L3 and L9
       11683 L3 AND L9
=> L15 and L4 and L6
             3 L15 AND L4 AND L6
=> d ti, au, so 1-3
L16 ANSWER 1 OF 3
                       MEDLINE
     Oxidant stress activates AP-1 and heparin-binding epidermal growth
     factor-like growth factor transcription in renal epithelial cells.
     Sakai M; Tsukada T; Harris R C
ΔĦ
SO
     EXPERIMENTAL NEPHROLOGY, (2001) 9 (1) 28-39.
     Journal code: 9302239. ISSN: 1018-7782.
L16 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
ΤТ
     Oxidant stress activates AP-1 and heparin-binding epidermal growth
     factor-like growth factor transcription in renal epithelial cells
ΑU
     Sakai, Masahiro; Tsukada, Toshiaki; Harris, Raymond C.
SO
     Experimental Nephrology (2000), Volume Date 2001, 9(1), 28-39
     CODEN: EXNEEG; ISSN: 1018-7782
L16 ANSWER 3 OF 3 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
     Oxidant stress activates AP-1 and heparin-binding epidermal growth
ΤТ
     factor-like growth factor transcription in renal epithelial cells.
ΑU
     Sakai M.; Tsukada T.; Harris R.C.
     Experimental Nephrology, (2001) 9/1 (28-39).
SO
     Refs: 69
     ISSN: 1018-7782 CODEN: EXNEEG
=> d his
     (FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)
     FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON
     17 JUN 2002
L1
           5659 EGR-1
L2
            163 EARLY GROWTH RESPONSE FACTOR-1
L3
         281805 TRANSCRIPTION FACTOR?
L4
           4746 ISCHEMIC TISSUE
L6
         140326 REPERFUSION
L9
         211490 OLIGONUCLEOTIDE?
L12
              5 L1 AND L4 AND L6
L13
              1 DUP REM L12 (4 DUPLICATES REMOVED)
L14
              1 L1 AND L9 AND L6
L15
          11683 L3 AND L9
L16
              3 L15 AND L4 AND L6
```

```
ENTER (L16), L#, OR ACC:acc
'ACC' NOT VALID WITH MULTIFILE PROCESSING
```

=> d his

(FILE 'HOME' ENTERED AT 11:16:11 ON 17 JUN 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 11:25:40 ON 17 JUN 2002 L15659 EGR-1 L2 163 EARLY GROWTH RESPONSE FACTOR-1 L3 281805 TRANSCRIPTION FACTOR? L44746 ISCHEMIC TISSUE L6 140326 REPERFUSION 211490 OLIGONUCLEOTIDE? L9 5 L1 AND L4 AND L6 L12 1 DUP REM L12 (4 DUPLICATES REMOVED) L13 L14 1 L1 AND L9 AND L6 L15 L16 11683 L3 AND L9 3 L15 AND L4 AND L6